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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Bonnie R. Hames)

Serial No. : 10/031,208)

Filing Date: May 24, 2002)

Title: Phenol Removal)
Pretreatment Process)

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PCT Patent Application
PCT/US01/11806

Atty. Dkt. No. NREL 98-21

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3-20-03

PRELIMINARY AMENDMENT

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Commissioner of Patents and Trademarks
BOX PCT
Washington, D.C. 20231

Sir:

In advance of prosecution, and prior to taking this application up for examination on the merits, please amend the claims as follows:

IN THE CLAIMS:

Please cancel claims 2, 3 and 7 without prejudice.

1. (Amended) A process for [removing] selective adsorption of biomass derived phenols selected from the group consisting of guaiacol, syringol, isolugenol, vanillin, and lignin from [an aqueous solution] a biomass hydrolysate medium comprising [the steps of]:

- (a) contacting a mixture comprising the[solution] hydrolysate medium and a metal oxide;
- (b) forming a phenols compound metal oxide complex;

(c) removing the phenols metal oxide complex from the mixture[.] ; said metal oxide is selected from the group consisting of titanium oxide, vanadium oxide, and zirconium oxide.

6. (Amended) The process of claim 1 further comprising regenerating the metal oxide after removing the phenols metal oxide complex from the mixture.